



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/752,651	01/07/2004	Richard C. Fuksa	926512-101092	4106
23644	7590	09/01/2006	EXAMINER	
<b>BARNES &amp; THORNBURG LLP</b> <b>P.O. BOX 2786</b> <b>CHICAGO, IL 60690-2786</b>				SCHNEIDER, CRAIG M
ART UNIT		PAPER NUMBER		
				3753

DATE MAILED: 09/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

88

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/752,651 Examiner Craig M. Schneider	FUKSA ET AL. Art Unit 3753

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 21 August 2006.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-8 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-8 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 1/7/2004 is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
     1. Certified copies of the priority documents have been received.  
     2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
     3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                    | Paper No(s)/Mail Date: _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date: _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/21/2006 has been entered.

### ***Drawings***

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the valve must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an

Art Unit: 3753

application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-8 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The recitation in claim 1, line 11 "said valve insert pin is coupled to a valve, said valve moveable relative to said valve plate member." is not described in the specification and drawing in such a way as to reasonably convey to one skilled in the relevant art what is being claimed.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Art Unit: 3753

7. Claim 1 recites the limitation "said first member" in line 10. It is unclear what previously recited element is "said first member" as there is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wise (3,621,868) in view of Miller.

Wise discloses a valve pin insert (32) in combination with a valve plate, the pin insert having a body inserted into a valve plate (26) as seen in Figures 3 and 4 (col. 2, lines 10-12) and in the insert position, the valve pin insert is fixedly connected to the first member; the valve pin insert is coupled to a valve (33), the valve moveable relative to the valve plate member (col. 2, lines 18-28). Wise does not disclose a valve pin insert wherein the body has a lower shank at one end of the body and an upper shank adjacent to the lower shank, the lower shank being of a first diameter and the upper shank being of a second diameter, the first diameter being less than the second diameter and wherein between the lower shank and the upper shank of the body an undercut shoulder forms a recess opening in the direction toward the lower shank, the recess forming a tooth that shears material of the valve plate as the pin is inserted into a

Art Unit: 3753

hole in the valve plate and wherein the valve pin insert has an insert position, wherein when in the insert position, the upper and lower shank are disposed in the valve plate. Miller discloses a dowel (10) that has a lower shank at one end of the body and an upper shank adjacent to the lower shank as seen in Figure 4B col. 3, lines 23-25), the lower shank being of a first diameter and the upper shank being of a second diameter, the first diameter being less than the second diameter and wherein between the lower shank and the upper shank of the body an undercut shoulder forms a recess opening in the direction toward the lower shank, the recess forming a tooth that shears material as the dowel is inserted into a hole as seen in Figure 4B and wherein the valve pin insert has an insert position, wherein when in the insert position, the upper and lower shank are disposed in the valve plate. The diameter of the lower shank is less than the diameter of the hole in the valve plate. The diameter of the hole of the valve plate must be larger than the dowel when the dowel is inside the hole.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the dowel construction of Miller onto the valve pin of Wise, in order to have a quick and easy connection (abstract of Miller).

10. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wise and Miller as applied to claim 1 above, and further in view of Kawaguchi et al..

Wise and Miller disclose all the features of the invention except that the pin is made of PEEK. Kawaguchi et al. discloses the use of PEEK as a corrosion resistant material (page 3, paragraphs 53-55).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute the plastic material utilized by Wise and Miller for the PEEK material of Kawaguchi et al., in order to make the plastic more chemical resistant.

11. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wise and Miller as applied to claim 1 above, and further in view of Malloy et al..

Wise and Miller disclose all the features of the claimed invention except that the valve plate is made of plastic. Malloy et al. disclose the use of PTFE for chemical resistance (col.2, lines 57-62).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the PTFE as taught by Malloy et al. onto Wise and Miller, to make the material that the dowel is being inserted into more resistant to chemicals.

12. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wise and Miller as applied to claim 1 above, and further in view of Runge.

Wise and Miller disclose all the features of the claimed invention except that the undercut- shoulder is molded into the pin, Runge discloses that the dowel is molded (col. 2, lines 58-68 onto col. 3, lines 1-2 and in claim 4).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to mold the entire pin of Wise and Miller as taught by Runge which would include the undercut shoulder, in order to decrease manufacturing cost.

13. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wise and Miller as applied to claim 1 above, and further in view of Kindt.

Art Unit: 3753

Wise and Miller disclose all the features of the claimed invention except that the undercut shoulder is machined into the pin. Kindt discloses machining of a portion of the dowel below a flange (col. 2, lines 4-8).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the undercut shoulder of Wise and Miller machined as is the area below the flange of Kindt, in order to make sure that the valve pin inser of Wise and Miller is in coaxial alignment of the bored recess in the work.

14. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wise and Miller as applied to claim 1 above, and further in view of Hinkel.

Wise and Miller disclose all the features of the claimed invention except that the undercut shoulder extends to a depth beneath the surface of the lower shank. Hinkel discloses the use of an undercut shoulder extending to a depth beneath the surface of the lower shank as seen in Figure 2b(col. 4, lines 47-67 onto col.5, lines 1-53).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the undercut shoulder of Hinkel onto the valve pin insert of Wise and Miller, in order to create a positive-locking manner.

15. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wise and Miller as applied to claim 1 above, and further in view of Applicant's Exhibit A.

Wise and Miller disclose all the features of the claimed invention except that the pin further comprises a stud extending axially outwardly from the body. Applicant's exhibit A discloses the use of a stud at the end of the dowel as shown in Figure 1.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the stud of Applicant's Exhibit A onto the pin insert of Wise and Miller, in order to attach items to the end of the pin insert.

***Response to Arguments***

16. Applicant's arguments filed 8/21/2006 have been fully considered but they are not persuasive. The valve plate of Wise is as much of a valve plate as applicant's valve plate is. The combination of Wise and Miller is being made to incorporate the attaching means of Miller onto the valve pin of Wise. Even though Wise does not disclose that the anchoring of the valve pin can be done in a different manner Miller discloses the motivation to make the changes to the valve pin of Wise.

17. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

***Conclusion***

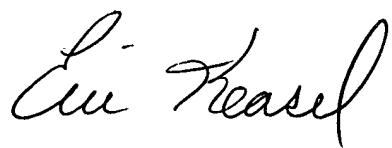
18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Craig M. Schneider whose telephone number is (571) 272-3607. The examiner can normally be reached on M-F 8:30 -5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eric Keasel can be reached on (571) 272-4929. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3753

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CMS CMS  
August 23, 2006



ERIC KEASEL  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700